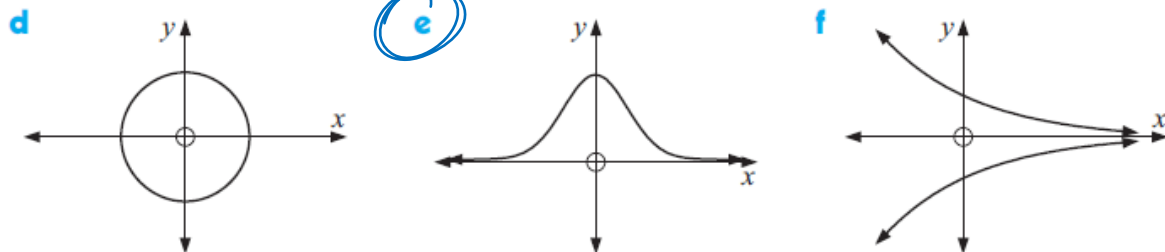
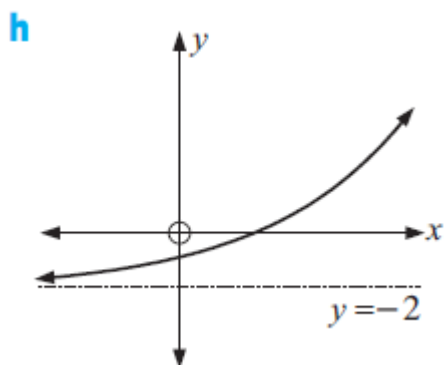


1. Which of the following are functions? *only e*



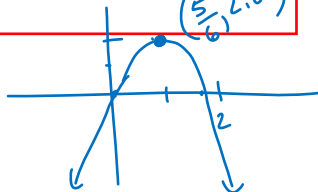
2. List the domain and Range:



Domain: \mathbb{R} (all real numbers)

Range: $y > -2$

e $y = 5x - 3x^2$



$D: \mathbb{R}$

$R: y \leq 2.08$

2 If $g: x \mapsto x - \frac{4}{x}$, find the value of:

c $g(-1)$

$$= -1 - \frac{4}{-1}$$

$$= -1 + 4$$

$$= 3$$

d $g(-4)$

$$= -4 - \frac{4}{-4}$$

$$= -4 + 1$$

$$= -3$$

e $g(-\frac{1}{2})$

$$= -\frac{1}{2} - \frac{4}{-\frac{1}{2}}$$

$$= -\frac{1}{2} + 8$$

$$= 7.5$$

on calc:

$$y_1 = x - 4/x$$

Homescreen:

$$y_1(-1/2) =$$

or

Graph and Trace

Domain

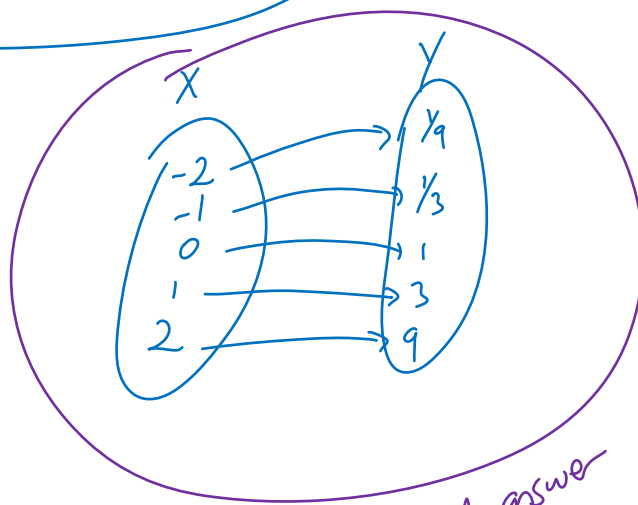
For the following functions of $f : x \mapsto f(x)$ on $-2 \leq x \leq 2$ where $x \in \mathbb{Z}$:

i draw a mapping diagram to represent $f(x)$

$$f(x) = 3^x$$

integers

x	y
-2	$3^{-2} = \frac{1}{9}$
-1	$3^{-1} = \frac{1}{3}$
0	$3^0 = 1$
1	$3^1 = 3$
2	$3^2 = 9$



Final answer